

WEB 2.0 SUMMIT

6: NOVEMBER: 08

Transforming the Network to an
Enterprise for the Warfighter

LTG Jeff Sorenson

Chief Information Officer/G-6

AMERICA'S ARMY: THE STRENGTH OF THE NATION
ARMY STRONG





Agenda



- ④ **Era of Persistent Conflict**
- ④ **Information Technology Cycles**
 - IT Requirements & Methodology
 - Looking Back – What It Means
- ④ **Web 2.0 & Networking for the Warfighter**
 - Warfighter Forums
 - Battle Command
 - Cyber Warfare
- ④ **Conclusions**





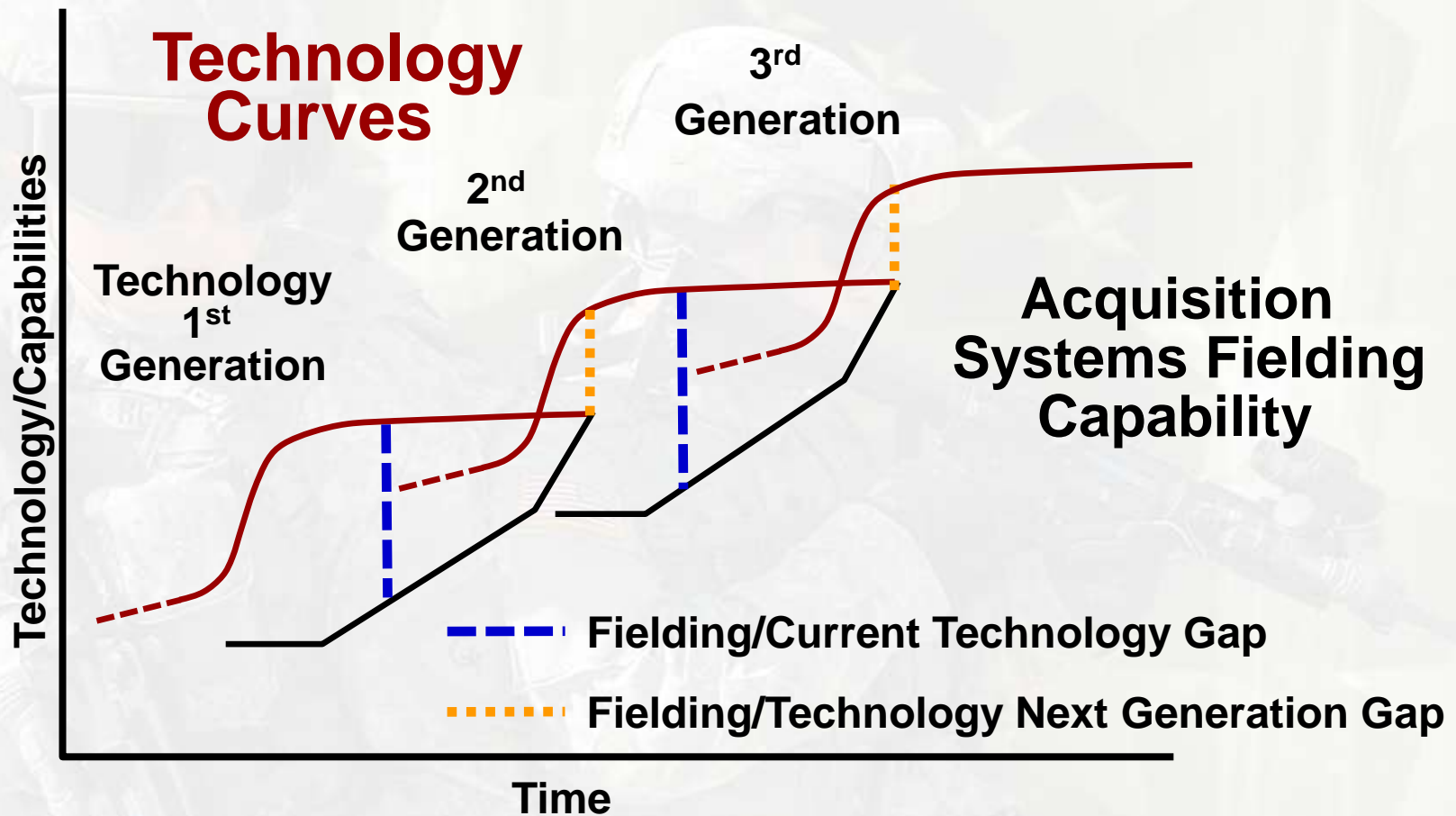
Era of Persistent Conflict



Protracted confrontation . . . fueled by six important trends



Current Acquisition/Fielding



***Results – Capability to the Field
Significantly Lags Behind Technology***



Looking Back – What It Means

All in less than one lifetime!



MSE development
1980

ASAS Block I
1984

SINGARS production
1987

GPS used Desert Storm
1991

**TACTICAL DIGITIZATION
INTERNET & WEB-SVCS**

Digitization initiated
1994

Tactical Internet
1997

Digitization
1999+

2003

???

2004



Desert One
1980



Urgent Fury
1983



Just Cause
1989-90



Desert Storm
1991



Uphold Democracy
1994-95



Joint Endeavor
1995+



Enduring Freedom
2001+



Iraqi Freedom
2003+



Katrina
2005

1965 Moore's Law

1969 ARPANET is born

1980 Internet protocols

1983 TCP/IP - ARPANET

1984 CISCO

1985 Windows 1.0

1989 Internet 100,000 hosts

1990 "World Wide Web"

1992 Internet 1,000,000 hosts

1994 Shopping malls on net;

1995 Sun - JAVA; Operation Home Front

1997 "weblog" coined;

2002 Internet 171,000,000 hosts

2004 Google goes public; ~85% all searches

12/07 > 112 million blogs

2005 Internet 350,000,000 hosts; 8,000,000 blogs

INTERNET

WEB 1.0

WEB 2.0



Stryker Light Armored Vehicle-III



Stryker LAV-III

- Family of Vehicles (Nov 2000)
 - 2 main Variants: Infantry Carrier Vehicle & Mobile Gun System
 - 11 different configurations/uses
- Lighter & more mobile than Abrams & Bradley
- Developed as interim for Future Combat Systems (FCS) Vehicles
- Goal is to deploy a Stryker Brigade worldwide in 96 hours





Stryker Brigade Combat Teams



2/25 ID
(SBCT)



Schofield
Barracks,
Hawaii

1/25 ID
(SBCT)



Fort
Wainwright
Alaska

3/2 ID
(SBCT)



Fort
Lewis,
Washington

4/2 ID
(SBCT)



Fort
Lewis,
Washington

5/2 ID
(SBCT)



Fort
Lewis,
Washington

56/28 ID
(SBCT)
PAANG



Pennsylvania

2CR
(SBCT)



Germany





SBCT Warfighters' Forum (WfF)



https://forums.bcks.army.mil - STRYKER LOGISTICS [Tomoye Ecco] - Microsoft Internet Explorer

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You are here: LOGNet > MULTIFUNCTIONAL LOGISTICS > STRYKER LOGISTICS

BCKS
U.S. ARMY BATTLE COMMAND KNOWLEDGE SYSTEM
US Army Combined Arms Center

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☒ This Forum
☐ Warrior Knowledge Base

Search

BCKS Explorer

LOGNet

- SUSTAINMENT CENTER OF EXCELLENCE (SCoE)
- SUSTAIN WARFIGHTERS' FORUM
- AMC LOGSA COMMUNITY
- ORDNANCE COMMUNITY
- QUARTERMASTER COMMUNITY
- TRANSPORTATION COMMUNITY
- MULTIFUNCTIONAL LOGISTICS

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Discussions Highlighted by Members

Latest Community-Wide Discussions

Stryker Vehicle Weight Growth Started by [David Frye](#) Thu, Oct 9, 5:33 PM
Last reply by [Todd McCaffrey](#) Mon, Oct 13, 2:18 PM
I am researching the increase in weight of ground combat vehicles from initial concept to final version. The analysis will be used in determining payload requirements for future airlifters. Can...

Should we replace the RV with the ICV, CV or modified RV? Started by [Richard Kaiura](#) Mon, Jul 21, 3:32 PM
Recently, the SWIF received the following top five issues with the M1127 Reconnaissance Vehicle (Stryker). a. The location of vehicle commander (rear of the RV) reduces the full command and control...

Task Org TTPs/SOPs for Stryker mounted and dismounted leaders at the platoon and company level Started by [Timothy Stinnett](#) Mon, Mar 3, 2:46 PM
Last reply by [Ryan Reichert](#) Thu, Mar 27, 4:53 PM
CDRs and Staff, BLUF: Request your feedback on decision making and TTPs for mounted leader control of Strykers and mounted heavy weapons at PLT and CO level vs. leaders from the same element on the...

"Becoming an Adaptive Leader" - MAJ Whiffen Started by [Jim Clegg](#) Wed, Feb 13, 11:50 AM

Participate

Become a Member

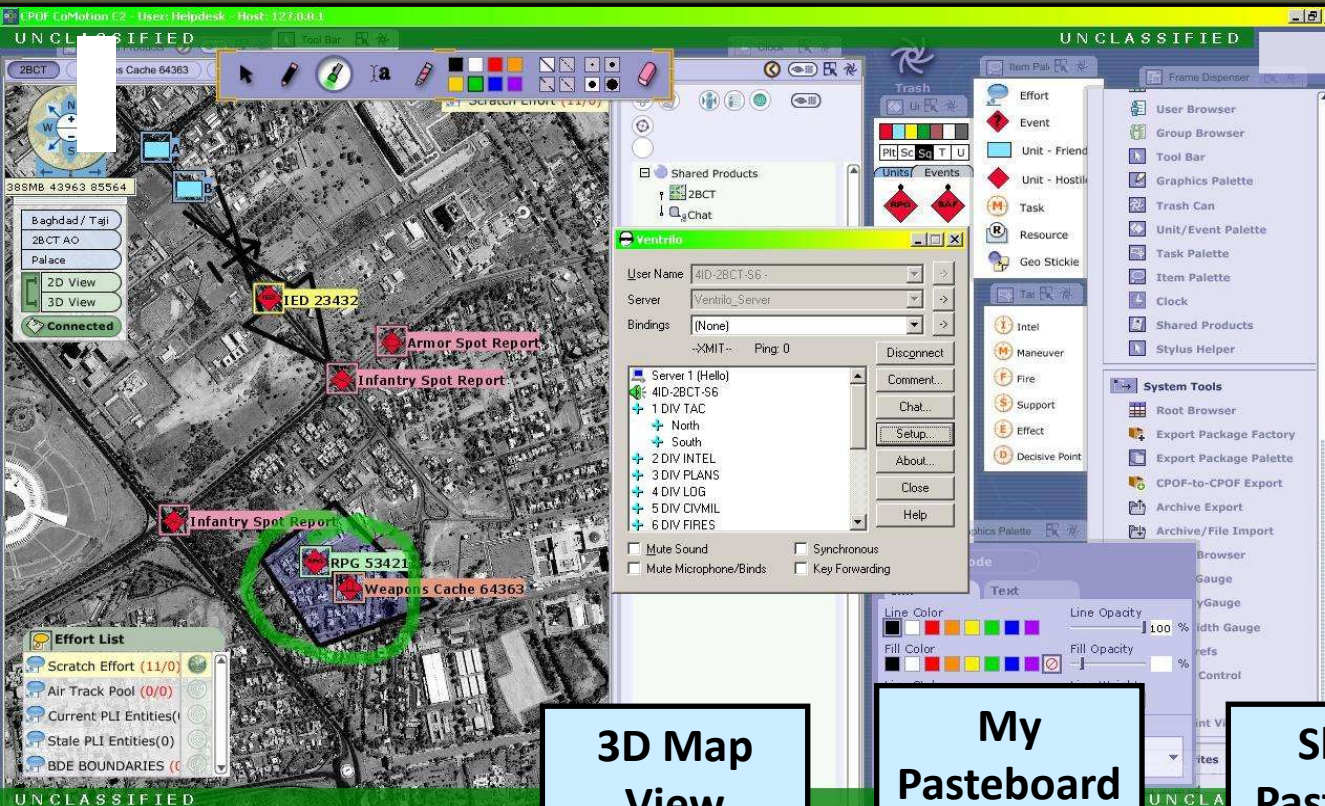
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Command Post of the Future (CPoF)

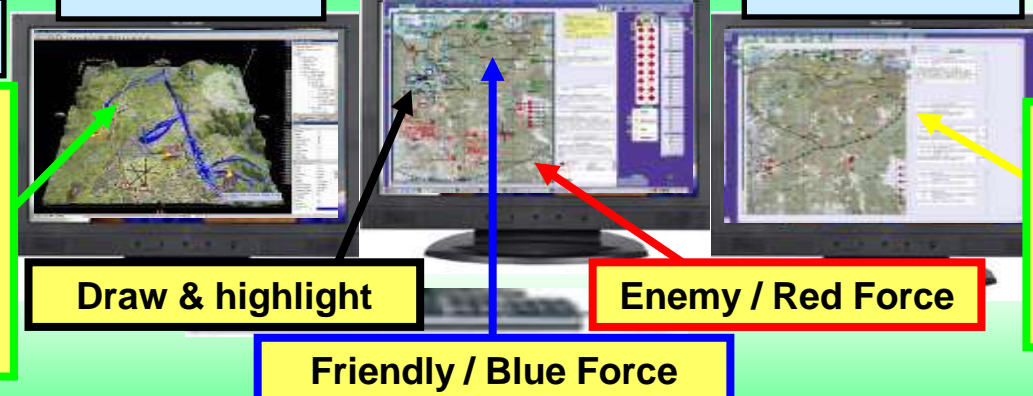


Enables Near-Real Time Collaboration

- Dispersed Situational Awareness Tool
- Common Operational Picture (COP)
- Collaborate with live map, VoIP & “white board” highlighting
- Visibility down to Company-level
- Situational Awareness & 2-D to Disadvantage Users

CPoF 3-screen Config

- Provides 3-D picture
- Provide rapid terrain appreciation
- Linked to 2-D Map
- Allows 3-D Map manipulation



- Real time updating
- Other Pasteboards
 - Master Schedule
 - SITREPs
 - All are Shareable



Command Post of the Future (CPoF)



Command Post of the Future (CPoF)

**Video “Whiteboard” & VoIP
Collaboration**



Command Post of the Future (CPoF)



Command Post of the Future (CPoF)

Use of the Highlight Pen – Everyone watching this map will see the Green Circle as point-of-interest/discussion



Command Post of the Future (CPoF)



CPoF CoMotion C2 - User: Helpdesk - Host: 127.0.0.1

UNCLASSIFIED

2BCT

388MB 43933 85584

Baghdad / Taji
2BCT AO
Palace

2D View
3D View
Connected

IED 23432

Armor Spot Report

Infantry Spot Report

Infantry Spot Report

RPG 53421

Weapons Cache 64363

Effort List

- Scratch Effort (9/0)
- Air Track Pool (0/0)
- Current PLI Entities(1)
- Stale PLI Entities(0)
- BDE BOUNDARIES (0)

Shared Products

- 2BCT
- Chat

Trash

Units

Events

Effort

Event

Unit - Friend

Unit - Hostile

Task

Resource

Geo Sticker

Intel

Maneuver

Fire

Support

Effect

Decisive Point

System Tools

- Root Browser
- Export Package Factory
- Export Package Palette
- CPoF-to-CPoF Export
- Archive Export
- Archive/File Import

Draw Mode

Ink

Text

Line Color

Fill Color

Line Style

Graphic Type

Line Opacity

Fill Opacity

Line Weight

LINE

UNCLASSIFIED



Command Post of the Future (CPoF)



Command Post of the Future (CPoF)

Tooltip Capabilities – Anyone watching this map can “pull up” the live data on the point-of-interest



Command Post of the Future (CPoF)



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RPG 53421

Weapons Cache 64363 : ? Severity : Hostile ; Red : WEAPONS CACHE
26 1625Q Oct 08
38SMB 44058 85433
No associated items.

Intel on Weapons Cache received from interrogation of Mahtab Abdul-Salaam

Owner Groups: Administrator, IntelAuthority, Helpdesk

Last modified: 26 1626Q Oct 08 by Helpdesk
Created: 26 1625Q Oct 08 by Helpdesk

URLs (no URLs)
Posts (no posts)

Displayed from: Scratch Effort

Effort List

- Scratch Effort (9/0)
- Air Track Pool (0/0)
- Current PLI Entities(1)
- Stale PLI Entities(0)
- BDE BOUNDARIES (0)

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Trash

Item Palette

- Effort
- Event
- Unit - Friend
- Unit - Hostile
- Task
- Resource
- Geo Sticker
- Intel
- Maneuver
- Fire
- Support
- Effect
- Decisive Point

Graphics Palette

System Tools

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Draw Mode

Ink

Text

Line Color

Fill Color

Line Style

Graphic Type

LINE

Line Opacity

Fill Opacity

Line Weight

UNCLASSIFIED



Command Post of the Future (CPoF)



Command Post of the Future (CPoF)

Ventrilo VoIP Client – allows online conversations between CPoF Users



Command Post of the Future (CPoF)



CPoF CoMotion C2 - User: Helpdesk - Host: 127.0.0.1

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2BCT Weapons Cache 64363

Scratch Effort (9/0)

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Created: 26 1625Q Oct 08 by Helpdesk

URLs (no URLs)
Posts (no posts)

Displayed from: Scratch Effort

Ventrilo

User Name: 4ID-2BCT-S6
Server: Ventrilo_Server
Bindings: [None]

--XMIT-- Ping: 0

Disconnect
Comment...
Chat...
Setup...
About...
Close
Help

☐ Mute Sound
☐ Mute Microphone/Binds
☐ Synchronous
☐ Key Forwarding

System Tools

- Root Browser
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- Archive Export
- Archive/File Import

Line Color: [Color Picker]
Fill Color: [Color Picker]
Line Style: [Line Style Picker]
Graphic Type: [Graphic Type Picker]

Line Opacity: 100 %
Fill Opacity: 0 %
Line Weight: [Line Weight Picker]

UNCLASSIFIED



Command Post of the Future (CPoF)



Command Post of the Future (CPoF)

Use of the Highlight Pen & Ventrilo
VoIP capabilities in conjunction to
provide real-time collaboration



Command Post of the Future (CPoF)



CPoF CoMotion C2 - User: Helpdesk - Host: 127.0.0.1

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2BCT

389MB 43933 85584

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Ventrilo

User Name: 4ID-2BCT-S6
Server: Ventrilo_Server
Bindings: (None)

Server 1 (Hello)
4ID-2BCT-S6
+ 1 DIV TAC
+ North
+ South
+ 2 DIV INTEL
+ 3 DIV PLANS
+ 4 DIV LOG
+ 5 DIV CIVMIL
+ 6 DIV FIRES

Line Color: [Color Picker]
Fill Color: [Color Picker]
Line Style: [Line Style Picker]
Graphic Type: LINE

Line Opacity: 100 %
Fill Opacity: 0 %
Line Weight: [Line Weight Picker]

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Command Post of the Future (CPoF)



Command Post of the Future (CPoF)

Use of tactical graphics (black arrow & black-outlined purple box) to direct actions of responding Elements



Command Post of the Future (CPoF)



CPoF CoMotion C2 - User: Helpdesk - Host: 127.0.0.1

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2BCT Weapons Cache 64363

38SMB 43963 85564

Baghdad / Taji
2BCT AO
Palace

2D View
3D View
Connected

IED 23432

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Infantry Spot Report

RPG 53421

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Draw Mode

Ink

Line Color

Fill Color

Line Style

Graphic Type

LINE

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Fill Opacity

Line Weight

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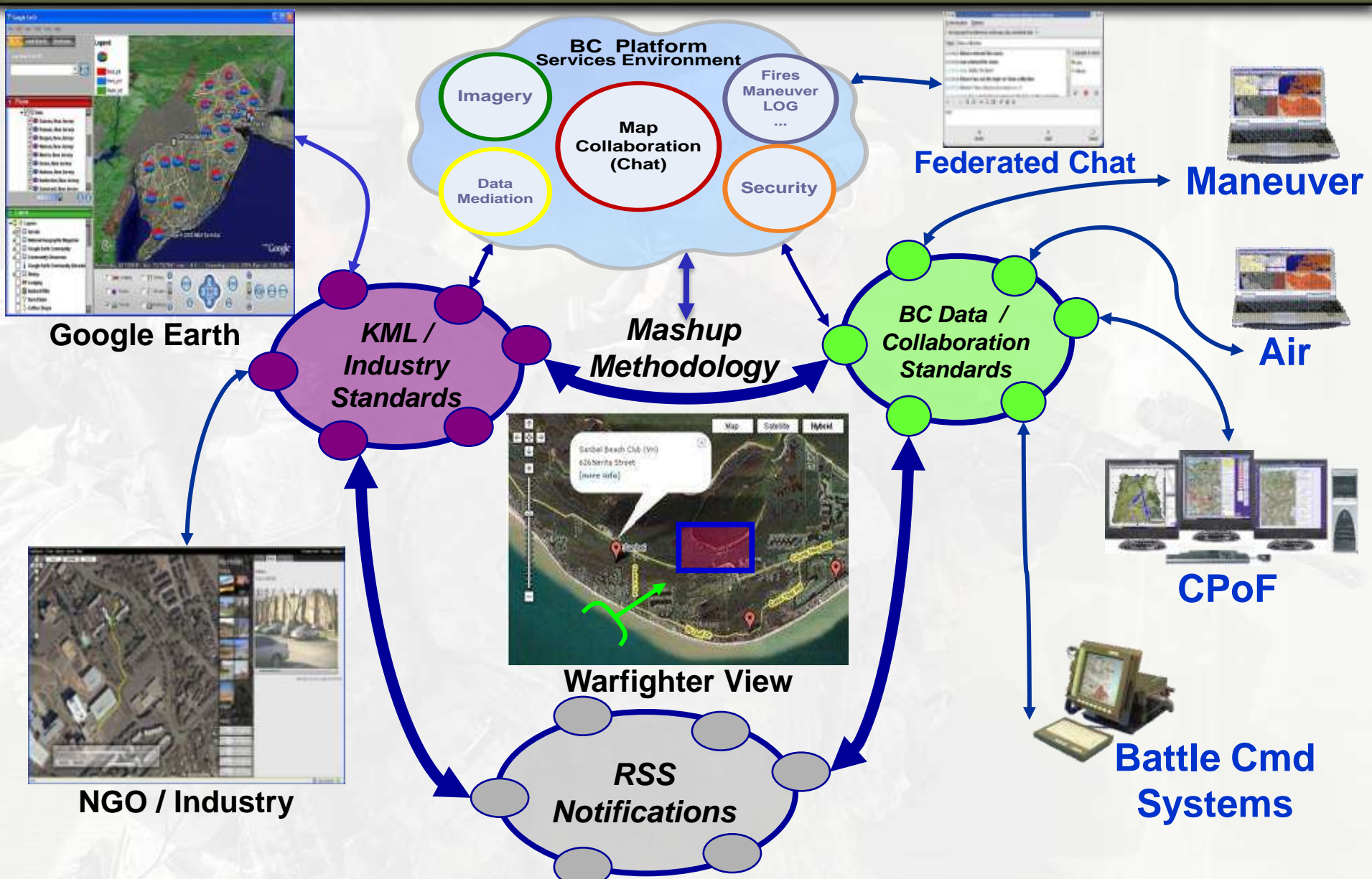
Line Color
Fill Color
Line Style
Graphic Type
LINE

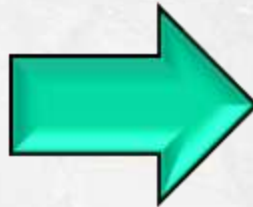
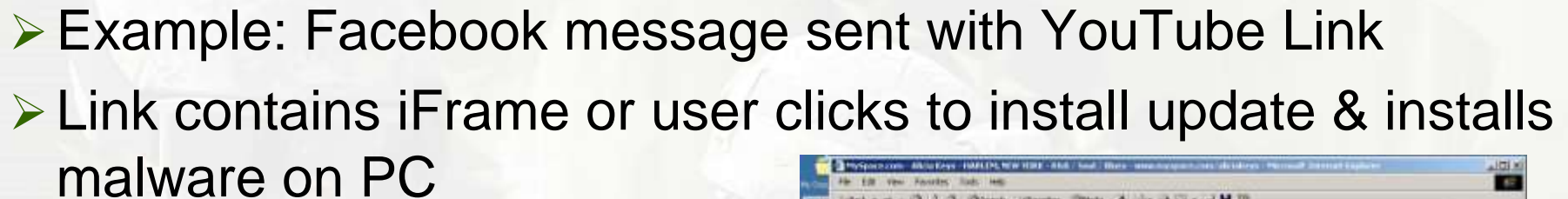
Line Opacity
Fill Opacity
Line Weight

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Battle Command – Web 2.0





- 28,940 different malicious & unwanted programs were detected on User PCs in Aug, a increase of 8,000 from Jul
- Projections are for a 10-fold increase in malware objects in 2008 – a ‘hockey-stick’ growth of ID theft & Cyber crime



Botnets

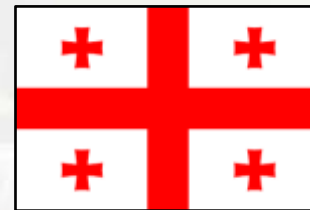


- In 2008 Botnets continued to become worse – a trend expected to continued next year
 - 2007 estimates 10% of online computers were in Botnets
 - 2008 estimates Botnets may comprise up to 15% of computers
- Botnets growing at faster rate than viruses or spam due to:
 - Infections can occur thru legitimate Web sites
 - Bot exploits/malware delivery are more sophisticated & obscure
 - Users need do nothing to become infected, e.g. visit a Website
- Botnets/Bot-Armies harness considerable computing power to engage in a variety of insidious & malicious activities
 - Data Theft (SSAN, Credit Cards, Trade Secrets, etc.)
 - DDoS Attacks
 - Spam Delivery
 - DNS Server Spoofing



Cyber Warfare

GEORGIA



Source: Georgia Tech Information Security Center (GTISC) Report – October 15, 2008



Cyber Warfare



GEORGIA



- In Future Warfare Cyber Warfare will accompany traditional military actions
- Consider recent attacks in Georgia:
 - Source of Russian Cyber Attacks included Internet Traffic thru Turkey & Azerbaijan
 - DDoS attacks crippled Georgia limited Internet, Media outlets & Government sites
 - Multiple means included Route Hijacking, Server Compromise, Data Theft & Fake Sites

Source: Georgia Tech Information Security Center (GTISC) Report – October 15, 2008



Cyber Warfare



GEORGIA



Increasing Cyber Warfare activity is due to the following:

- Low cost for Cyber vs. Physical Attacks
- Lack of Cyber Defenses
- “Plausible Deniability” Internet affords
- Lack of “Cyber Rules of Engagement” in Conflicts between Nation States

Source: Georgia Tech Information Security Center (GTISC) Report – October 15, 2008



Conclusions!!!



Posturing for Persistent Conflict

...driving an Expeditionary Army



DoD Information Technology

...continuously lagging generation(s)



Army Way Ahead

...work comprehensive Web 2.0 effort with DoD & Industry



Assured Situational Awareness

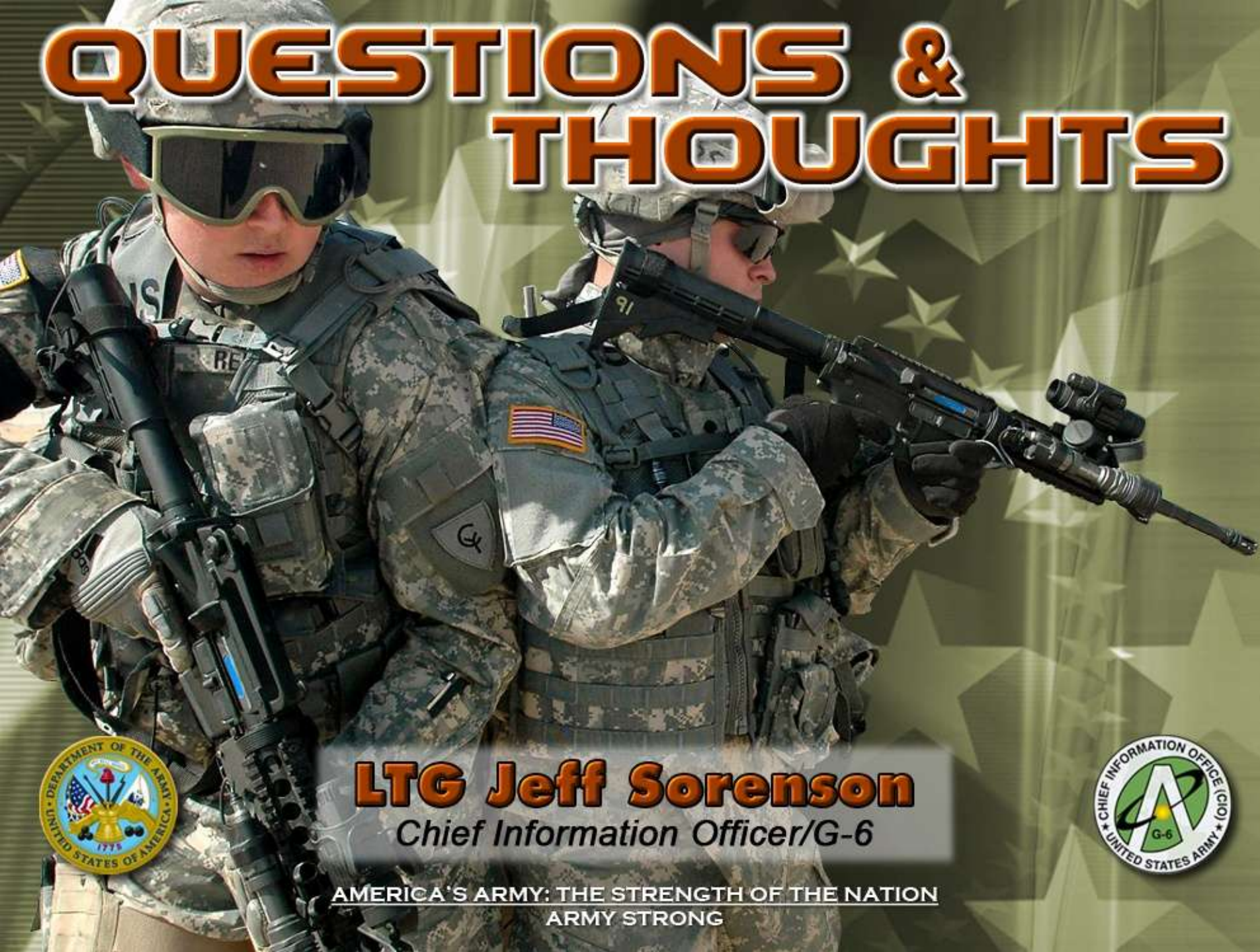
...Bottom Line to Joint Warfighter





Army Strong!

QUESTIONS & THOUGHTS



LTG Jeff Sorenson

Chief Information Officer/G-6

AMERICA'S ARMY: THE STRENGTH OF THE NATION
ARMY STRONG





Service-Disabled Vet-Owned Small Business (SDVOSB) Opportunities



- Veterans Benefits Act of 2003 & Executive Order 13360 sets goal of 3% for SDVOSB Contracts
- Over 12,000 SDVOSB firms registered in Central Contractor Registration (CCR) Database
- Center for Veterans Enterprise maintain VetBiz Vendor Info Pages (VIP) Database
- Army Small Business Website useful resource for SDVOSB
<http://www.sellingtoarmy.info>
- Government Services Agencies Website useful resource as well
<http://www.gsa.gov/portal>

